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ABSTRACT

An approach to obtain disciplinary specific salary information for the institution of higher education budget process by mid-winter is considered. The approach involves using current year institutional mean salaries and prior year relative average salaries by academic discipline to provide "current" salary comparisons by academic discipline in the fall term. An advantage of this approach is to provide more timely departmental faculty salary comparisons earlier to assist in institutional budget decisionmaking. Data sources are faculty data exchanged among several Association of American Universities public institutions and American Association of University Professors (AAUP) forms publicly available for these institutions. An explanation of the methodology is provided, and salaries of civil engineering faculty are used to illustrate the method. A question in deciding whether to use this approach is whether the error associated with the use of forecasted mean salaries by rank and discipline are offset by having comparative values 3 to 4 months sooner. Applying the annual increase in salaries across disciplines from the AAUP survey to prior year known salary factors by discipline from a data exchange will, on average, produce comparison figures within 2.0 percent of the true value. Appended is one table which summarizes the results of the study. (Contains 14 references.) (SW)

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More Timely Departmental Faculty Salary Comparisons

May, 1995

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Running Head: Faculty Salary Comparisons

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Jean Endo
Editor
AIR Forum Publications

Abstract

Increasing reliance on peer comparisons to demonstrate institutional performance and contribute to institutional budget processes presents a challenge to institutional researchers when reporting departmental faculty salary comparisons. On one hand, mean institutional salary information is universally available in the fall from IPEDS *SA* or AAUP survey participation. On the other hand, information about salaries by discipline is not universal and is typically not available until spring. This paper examines the possibility, and associated problems, of using current year institutional mean salaries and prior year relative average salaries by academic discipline to provide "current" salary comparisons by academic discipline in the fall term, early enough in the budget planning process to be a successful contributor.

Introduction

Faculty salaries are of key interest to the institution. They are the largest instructional expense and are critical to the institution's ability to retain and attract a qualified faculty and to maintain the positive morale of continuing faculty. Faculty salaries are a principal source of job dissatisfaction (Tack & Pattitu, 1992) and remain a primary reason for faculty leaving an institution (Breneman & Youn, 1988; Burke, 1987). Matier (1990) found that cash salary was the number one enticement of competing offers and was of major importance in decisions to leave. Matier (1991) also found salary to be of major importance in recruitment, although somewhat less so than in retention. This finding was supported by Smart (1990) who also reported that the importance of salary was inversely related to tenure status and current salary amount. It is evident that faculty salaries are important. Important because it is in paying salaries that the institution most clearly expresses what characteristics it values and how much they are valued. In turn, the salaries of individual faculty members become an expression of the quality of faculty on average and the competitiveness of the institution's salaries when expressed as mean salaries in comparison to those of peer institutions. Salaries have little or no meaning without comparison either within or between individuals, departments, and institutions (Frank, 1984; Nichols-Casebolt, 1993).

The only salary question supported by the analysis presented in this paper will be whether salaries are competitive, consistent with discipline peers at other institutions (Howard, Snyder, & McLaughlin, 1992). The only analytical distinctions that will be made by this paper will be those of discipline and rank. When comparing salaries between or within institutions, rank and discipline differences are probably the most widely recognized distinctions considered generally valid and minimally required to determine whether salaries are competitive (Hansen, 1985; Moore, 1993).

Statement of the Problem

If comparison of faculty salaries with those of peer institutions is important, then researchers are faced with the challenge of gathering, analyzing, and reporting the information within the time-frame of institutional budget decision making. Institutional budget processes are typically well underway in the fall

semester and are well formed by late spring. Comprehensive faculty salary information is typically not available until late in the spring. However, by late spring, there are excellent sources of information about institutional averages by rank and averages by discipline and rank.

Two sources of institutional faculty salary information have nearly universal participation and are very similar, the *AAUP Annual Survey of Faculty Compensation* and *IPEDS SA Salaries, Tenure, and Fringe Benefits of Full-time Instructional Faculty Survey*. Because participation is nearly universal and is reported at an institutional level of aggregation, most universities are willing to share their completed forms when prepared in the fall term. After all, the information will soon be publicly available and the form is short. The clear disadvantage of these surveys is the lack of faculty salary data by discipline. The lack of disciplinary data may not be a concern for institutional comparisons, but it is obviously a critical problem for collegiate or departmental comparisons. Institutions desiring departmental and collegiate analysis will need a different source.

Here again, there are two public sources of faculty salaries by discipline and rank and both are produced by the research staff at Oklahoma State University, *Faculty Salary Survey by Discipline* and the CUPA *National Faculty Salary Survey*. The first report includes data from about 75 members of the National Association of State Universities and Land-Grant Colleges. The second report includes data from about 300 College and University Personnel Association members. These reports are a wealth of information and display mean faculty salaries by rank and discipline within geographic regions (OSU) or presence of collective bargaining (CUPA). In addition to the annual publications with standard breakouts, custom reports based on a subset of institutions can be purchased at very reasonable cost. Many researchers will find these sources more than adequate to meet their research needs. There are, however, problems for some institutions in using either the public documents or custom reports for local studies. First, the aggregate disciplinary means may not be acceptable to institutional leaders. Second, participation, while large, is limited and may not include all peer institutions. Third, local administrators, especially those at the collegiate or departmental level, may not be satisfied with the anonymity assured participants by OSU and may demand to see mean

disciplinary salaries by institution. Fourth, the standard analytical clustering of CIP codes may not be the clustering of CIP codes that provides the most accurate comparative averages for an individual department, college, or institution. Fifth, and most important for this project, the annual public report and contracted custom reports are not generally available until well into the spring term. For some institutions there is another source of salary information by discipline and rank. Aggregated salaries by rank and discipline are often a confidential report for institutional exchanges. The exchange of data among similar institutions has several advantages for the participants, but again, the data are often not available early in the annual budget cycle.

Methodology

This paper examines the possibility of wedding the disciplinary information available through an institutional exchange, similar to that presented in the OSU *Faculty Salary Survey by Discipline* and the CUPA *National Faculty Salary Survey*, to information available through the IPEDS *SA* or AAUP faculty salary survey. The key advantage of this approach is to provide disciplinary specific salary information for budget processes by mid-winter, when the information's impact on the decision making process will be far more than it would be in late spring. Specifically, the methodology considers whether the relative salary differences by discipline from the previous year can be accurately inflated to current year salaries by using the known increase in mean salaries across disciplines. In other words, could last year's relationship between mean salary for law professors to the salary of all professors be extended to this year using this year's mean salary of all professors? If so, then the advantages of disciplinary distinctions from the exchange of disciplinary specific faculty salary data might be combined with the timeliness of the institutional IPEDS *SA* or AAUP data to make detailed comparative data available in the fall when it might contribute to budget processes.

The data sources for this study were faculty data exchanged among several AAU public institutions and AAUP forms publicly available for these same institutions. The faculty data exchanged among AAU institutions is similar to the information supplied by institutions participating in the OSU and CUPA surveys.

While this study relied upon a faculty salary data exchange, a similar approach could be taken using the OSU or CUPA reports or special studies. In this study, exchange information is a more comprehensive source of peer information that can be aggregated at the four-digit CIP level. The four-digit CIP level was selected because this institution has determined that a four-digit CIP cluster generally provides the best fit to the departmental structure. Institutions participating in the AAU exchange included the flagship universities of Arizona, Colorado, Florida, Illinois, Kansas, Maryland, Minnesota, Missouri, Nebraska, North Carolina, Oregon, Texas, Virginia, Washington, and Wisconsin; California-Berkeley, Iowa and Iowa State, Michigan and Michigan State, Ohio State, Indiana University and Purdue, Pennsylvania State, and SUNY-Buffalo.

The faculty described by the two data sources, AAUP and AAU, differ to a varying and unknown degree. But even if they differ, the differences will have limited affect if the reports are internally consistent. For example, the AAU exchange reports faculty FTE and is therefore not limited to full-time faculty only. Other differences may exist depending on local practices and interpretation of directions and the differences between the two cannot be easily attributed to faculty characteristics. Some institutions include more faculty on the AAUP, some more on the AAU. Some report higher salaries on the AAUP, some on the AAU. However, and as will be described next, the differences between reports is of little consequence as long as the institutional reports are consistent from year to year in their interpretation of the directions and the comparisons are of salary and are made at the level of discipline and rank (Casey et al., 1985; Simpson & Sperber, 1987).

The methodology is fairly simple. Faculty salary data shared by public AAU institutions from fiscal years 1990-1994 were processed as follows. First, faculty salaries were aggregated to the four-digit CIP code level within year for each institution. Second, the mean four-digit CIP salaries by rank were expressed as a salary factor where the denominator was the mean AAUP salary by rank for the group of public AAU institutions for the respective year and the numerator was the four-digit CIP salary by rank. Salary factors were therefore simple ratio measures. For example, from the AAU data exchange information it was determined that civil engineering professors were paid about $67,012 on average in FY 1990. The mean

salary of professors in FY 1990 from the AAUP survey was $60,892. The salary factor for professors of civil engineering in FY 1990 was therefore 1.094, about 10% above average. The mean salary for all professors from the AAUP survey in FY 1991 was $63,957. If the ratio from FY 1990, 1.101, were applied to the known all discipline AAUP average for FY 1991, $63,957, then the mean salary for civil engineering professors in FY 1991 can be forecast to be $70,417 ($63,957 x 1.101). Actual mean salary for civil engineering professors in FY 1991 was about $70,893, a fiscal year 1991 salary factor of 1.108. In this example, applying the disciplinary prior year salary factor to the mean salary across disciplines to yield a predicted disciplinary salary was fairly accurate, $476. The degree of accuracy can also be directly measured by the difference in the salary factors from the two years. For example, $476 is 0.7% of the FY 1991 AAUP average. The accuracy of this method is therefore directly reflected in salary factor change from year to year. In other words, if it were assumed that there would be no change in relative salary from year one to year two, then the extent of actual annual change is a direct measure of error.

Results

The results of this study are summarized in one table, *Table 1: Central Tendency and Dispersion of Salary Factors and FTE Figures by Discipline and Rank (1990-1994)*. Returning to the example of civil engineering faculty, Table 1 reports that the mean salary factor over the five-year period was 1.103 or 10.3% above average. The distance between the highest salary factor for the five-year period and the lowest was 2.3%. In other words, mean salaries for professors of civil engineering were not always 10.3% above average. They actually varied about 10.3% within a range of 2.3%. Although it is not presented in this table, the high was 1.115 in FY 1992 and the low was 1.092 in FY 1994. The mean absolute value of annual change in salary factors was 0.9%. In other words, if the method proposed here had been used to forecast salaries of professors of civil engineering, then the forecasts would have been in error by an average of slightly less than one percent. The fourth informational item reported for civil engineering professors was that their FTE amounted to 316 on average over the five years. This same information is presented for associate and assistant professors for each of the 99 four-digit CIP clusters. Summary statistics across

disciplines are also reported in Table 1.

Referring to *Table 1*, there was modest change across years in the relative salary of faculty by rank. Overall, mean salary factor range within discipline was 4.0% for professors, 4.2% for associate professors and 4.7% for assistant professors. Expressed as weighted mean salary factor range, the average range was 3.3%, 3.7%, and 5.1% respectively. This modest change, expressed as the mean absolute value of annual change, shows that rigid application would produce an average annual error of 1.5% for professors, 1.7% for associate professors, and 1.9% for assistant professors. As weighted averages, these mean absolute annual changes were somewhat more accurate at 1.2%, 1.6%, and 1.9% respectively. Of course, mean error would be far less than mean absolute error because estimates that were too high would be offset by those that were too low. The error reported here is therefore a maximum.

Insert Table 1 About Here

Conclusions

Whether the variance from year to year in salary factors is acceptable, and the method described here is useful, is a matter of subjective judgment. On one hand, there is error associated with the forecasts that would not be a problem if the institutional researcher were to wait until late spring for complete information. On the other hand, the forecasts can be made by mid-winter, when their value is greater than it would be in late spring. By late spring, budget processes will be well underway and will be difficult to change. Is the error associated with the use of forecasted mean salaries by rank and discipline offset by having comparative values three to four months sooner? Applying the annual increase in salaries across disciplines from the AAUP survey to prior year known salary factors by discipline from a data exchange will, on average, produce comparison figures within 2.0% of the true value. An equal or greater level of accuracy would likely result from using salary factors based on the NASULGC or CUPA reports.

Clearly, there are limitations with this approach. Foremost among these is that this method, like any other method that relies on detailed institutional reports, will be limited by annual changes in institutional policies and reporting practices. For faculty salary studies, these changes frequently reflect changing

interpretation of who to include in a report and how that person should be classified by discipline. A special challenge for this period was the change in CIP codes for business and health sciences. One cluster, medical basic sciences, had to be dropped because of the wild fluctuations in number of faculty included from year to year.

There is one last point to be made in defense of this process. Even if institutional researchers elect not to use this methodology and instead rely on actual annual reports by discipline and rank, the fluctuations in salary factors from year to year present a similar problem. The problem associated with producing comparative averages using the methodology described in this paper is one of accuracy of forecast due to variance between salary increases overall and salary increases within discipline. The problem in using actual values for comparative purposes remains variance in salary increases within discipline. The comparative targets typically move erratically and whether the lag is one year, as would be the case if the actual annual reports were used, or a modified one year lag, as is described here, there will be error in either system. In fact, unless there is a clear short-term trend, the errors will likely be of similar magnitudes.

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Table 1: Central Tendency and Dispersion of Salary Factors and FTE Figures by Discipline and Rank (1990-1994)

		Professor				Associate Professor				Assistant Professor			
		Mean Salary Factor	Salary Factor Range	Mean Annual Change	Mean FTE Faculty	Mean Salary Factor	Salary Factor Range	Mean Annual Change	Mean FTE Faculty	Mean Salary Factor	Salary Factor Range	Mean Annual Change	Mean FTE Faculty
Ag Business & Management	101	0.961	0.021	0.005	223	0.986	0.068	0.017	107	0.993	0.041	0.026	65
Agricultural Sciences	200	0.896	0.019	0.008	61	0.896	0.024	0.011	28	0.903	0.046	0.020	29
Animal Sciences	202	0.895	0.018	0.008	267	0.942	0.036	0.013	143	0.963	0.030	0.014	84
Food Sciences & Tech	203	0.880	0.033	0.009	72	0.928	0.038	0.009	35	0.972	0.045	0.012	36
Plant Sciences	204	0.886	0.015	0.008	301	0.927	0.017	0.009	167	0.948	0.028	0.016	105
Conservation	300	0.905	0.022	0.010	78	0.961	0.064	0.028	38	0.890	0.014	0.005	26
Natural Resources	301	0.887	0.057	0.027	59	0.919	0.046	0.018	38	0.895	0.032	0.009	33
Forestry	305	0.865	0.008	0.006	101	0.899	0.024	0.014	51	0.906	0.020	0.005	32
Architecture & Related	400	0.902	0.029	0.008	49	0.973	0.008	0.003	48	0.891	0.036	0.013	35
Architecture	402	0.922	0.019	0.005	168	0.961	0.027	0.008	142	0.922	0.014	0.004	99
Area, Ethnic & Cultural	500	0.951	0.053	0.025	43	0.977	0.047	0.019	48	0.893	0.039	0.016	44
Communications	900	0.907	0.011	0.003	25	0.968	0.020	0.009	32	0.973	0.047	0.016	28
Communications, General	901	0.885	0.025	0.013	58	0.922	0.030	0.011	52	0.886	0.043	0.013	61
Computer & IS, General	1101	1.193	0.013	0.003	166	1.248	0.013	0.006	146	1.232	0.026	0.010	184
Education	1300	0.909	0.052	0.028	153	0.975	0.040	0.020	118	0.888	0.042	0.019	72
Education, General	1301	0.931	0.030	0.008	216	0.947	0.027	0.009	115	0.906	0.063	0.016	86
Curriculum & Instruction	1303	0.870	0.028	0.012	167	0.925	0.007	0.003	130	0.887	0.029	0.011	88
Ed Admin & Supervision	1304	0.933	0.010	0.003	115	1.034	0.017	0.010	67	0.932	0.061	0.025	29
Educational Psychology	1308	0.881	0.013	0.006	96	0.937	0.030	0.015	56	0.897	0.012	0.004	31
Special Education	1310	0.796	0.037	0.017	75	0.883	0.036	0.011	45	0.861	0.046	0.012	33
General Teacher Ed	1312	0.850	0.053	0.017	58	0.873	0.053	0.021	43	0.857	0.061	0.030	30
Teacher Ed, Specific Acad	1313	0.869	0.011	0.004	171	0.942	0.045	0.014	202	0.891	0.038	0.009	165
Engineering	1400	1.111	0.046	0.018	180	1.190	0.049	0.019	85	1.174	0.051	0.024	89
Engineering, General	1401	1.131	0.011	0.005	152	1.172	0.045	0.024	79	1.168	0.069	0.032	60
Aerospace Engineering	1402	1.146	0.020	0.012	137	1.237	0.044	0.014	64	1.211	0.041	0.018	67
Agricultural Engr	1403	0.944	0.042	0.011	90	1.026	0.035	0.014	62	1.069	0.040	0.018	37
Chemical Engineering	1407	1.228	0.021	0.013	162	1.210	0.015	0.008	61	1.243	0.057	0.018	64
Civil Engineering	1408	1.103	0.023	0.009	316	1.167	0.026	0.015	147	1.176	0.031	0.014	121
Electrical Engineering	1410	1.209	0.026	0.007	441	1.237	0.031	0.015	225	1.247	0.063	0.019	232
Industrial Engineering	1417	1.197	0.050	0.020	77	1.223	0.054	0.027	49	1.194	0.037	0.022	47
Materials Engineering	1418	1.185	0.008	0.003	136	1.197	0.044	0.014	47	1.210	0.046	0.023	45
Mechanical Engineering	1419	1.171	0.024	0.009	300	1.231	0.026	0.012	177	1.203	0.037	0.009	148
Nuclear Engineering	1423	1.261	0.032	0.021	54	1.198	0.080	0.026	19	1.230	0.049	0.017	17
Engr-Related Technologies	1500	0.870	0.062	0.017	28	0.975	0.044	0.016	51	0.980	0.060	0.024	47

Table 1: Central Tendency and Dispersion of Salary Factors and FTE Figures by Discipline and Rank (1990-1994) - Continued

		Professor				Associate Professor				Assistant Professor			
		Mean Salary Factor	Salary Factor Range	Mean Annual Change	Mean FTE Faculty	Mean Salary Factor	Salary Factor Range	Mean Annual Change	Mean FTE Faculty	Mean Salary Factor	Salary Factor Range	Mean Annual Change	Mean FTE Faculty
Foreign Languages	1600	0.842	0.017	0.010	67	0.887	0.022	0.010	53	0.853	0.032	0.008	44
Foreign Languages, General	1601	0.905	0.040	0.013	124	0.896	0.015	0.006	114	0.850	0.017	0.007	118
East European Languages	1604	0.893	0.077	0.023	51	0.889	0.041	0.017	45	0.838	0.025	0.014	27
Germanic Languages	1605	0.874	0.026	0.007	133	0.860	0.010	0.007	86	0.813	0.026	0.014	64
Romance Languages	1609	0.895	0.007	0.004	246	0.877	0.015	0.005	190	0.831	0.006	0.002	165
Classical Languages	1612	0.922	0.025	0.008	95	0.866	0.046	0.021	55	0.817	0.009	0.004	47
Home Economics	1900	0.900	0.028	0.013	101	0.922	0.018	0.011	147	0.898	0.011	0.005	137
Family Development Studies	1907	0.886	0.043	0.017	62	0.931	0.048	0.021	56	0.883	0.054	0.034	39
Vocational Home Economics	2000	0.926	0.150	0.076	9	0.945	0.068	0.027	13	0.927	0.061	0.020	16
Law	2201	1.398	0.032	0.009	539	1.354	0.063	0.019	94	1.466	0.135	0.040	68
English Language & Lit	2300	0.967	0.050	0.017	38	0.901	0.062	0.015	19	0.817	0.043	0.019	19
English Lang & Lit, General	2301	0.889	0.023	0.006	616	0.874	0.011	0.005	451	0.821	0.017	0.005	264
Speech & Rhetorical	2310	0.858	0.028	0.014	68	0.882	0.032	0.015	69	0.841	0.034	0.015	58
Liberal Arts & Sciences	2400	1.299	0.180	0.050	6	1.088	0.173	0.009	2	0.906	0.196	0.078	2
General Studies	2401	0.819	0.041	0.023	63	0.841	0.031	0.015	34	0.783	0.048	0.019	46
Librarianship	2501	0.954	0.046	0.013	49	0.967	0.033	0.017	40	0.928	0.010	0.003	39
Biological Sciences	2600	1.145	0.108	0.027	122	1.003	0.069	0.027	41	0.991	0.053	0.029	37
Biology, General	2601	0.953	0.011	0.007	219	0.961	0.019	0.011	118	0.933	0.024	0.015	104
Biochemistry & Biophysics	2602	1.045	0.022	0.013	162	0.978	0.087	0.026	49	0.935	0.022	0.010	61
Botany	2603	0.899	0.015	0.010	182	0.915	0.012	0.007	86	0.930	0.023	0.014	65
Microbiology	2605	1.043	0.013	0.006	132	0.995	0.018	0.007	64	1.000	0.038	0.016	50
Misc Biological Specialties	2606	0.993	0.030	0.013	159	1.000	0.034	0.011	94	0.950	0.037	0.009	60
Zoology	2607	1.020	0.024	0.007	549	1.039	0.027	0.017	233	1.036	0.101	0.036	186
Mathematics, General	2701	0.992	0.026	0.006	830	0.965	0.014	0.007	288	0.945	0.015	0.008	208
Mathematical Statistics	2705	1.070	0.015	0.007	145	1.019	0.017	0.008	51	1.018	0.027	0.010	49
Multi/Interdisciplinary	3000	0.983	0.062	0.022	94	0.936	0.064	0.035	46	0.863	0.098	0.039	49
Parks, Recreation & Leisure	3100	0.894	0.047	0.024	30	0.894	0.051	0.027	44	0.833	0.046	0.020	22
Philosophy & Religion	3800	0.886	0.032	0.019	44	0.857	0.031	0.013	28	0.799	0.024	0.008	23
Philosophy	3801	0.921	0.034	0.012	205	0.885	0.015	0.009	106	0.861	0.018	0.008	67
Physical Sciences	4000	1.031	0.047	0.026	39	1.023	0.119	0.056	11	1.002	0.106	0.063	10
Astronomy	4002	0.996	0.045	0.015	110	0.939	0.041	0.019	44	0.936	0.046	0.022	17
Atmospheric Sciences	4004	1.045	0.031	0.015	68	1.002	0.077	0.028	27	0.988	0.081	0.039	17
Chemistry	4005	1.062	0.015	0.004	560	0.954	0.020	0.009	125	0.970	0.027	0.009	182
Geological Sciences	4006	0.946	0.003	0.002	258	0.962	0.019	0.007	109	0.934	0.015	0.007	71

Table 1: Central Tendency and Dispersion of Salary Factors and FTE Figures by Discipline and Rank (1990-1994) - Continued

		Professor				Associate Professor				Assistant Professor			
		Mean Salary Factor	Salary Factor Range	Mean Annual Change	Mean FTE Faculty	Mean Salary Factor	Salary Factor Range	Mean Annual Change	Mean FTE Faculty	Mean Salary Factor	Salary Factor Range	Mean Annual Change	Mean FTE Faculty
Physics	4008	1.023	0.025	0.007	776	1.024	0.031	0.022	175	1.057	0.016	0.009	145
Psychology	4200	0.908	0.076	0.019	33	0.963	0.042	0.020	11	0.886	0.072	0.020	20
Psychology, General	4201	0.991	0.012	0.006	525	0.955	0.019	0.008	197	0.908	0.037	0.010	199
Protective Services	4300	0.867	0.135	0.049	15	0.941	0.084	0.024	12	0.852	0.060	0.028	13
Public Administration	4400	1.089	0.077	0.026	40	1.048	0.069	0.030	17	1.009	0.075	0.037	18
Public Administration	4404	0.968	0.091	0.026	52	1.021	0.089	0.022	22	1.014	0.061	0.022	29
Social Work	4407	0.938	0.019	0.006	99	1.007	0.042	0.017	102	0.923	0.025	0.008	81
Social Sciences & History	4500	1.023	0.114	0.037	43	0.899	0.076	0.044	21	0.882	0.125	0.059	16
Anthropology	4502	0.903	0.036	0.013	214	0.900	0.024	0.010	107	0.853	0.033	0.008	78
Economics	4506	1.165	0.033	0.011	329	1.119	0.049	0.022	147	1.091	0.052	0.015	165
Geography	4507	0.934	0.016	0.007	133	0.947	0.047	0.020	89	0.903	0.033	0.016	58
History	4508	0.933	0.019	0.005	490	0.904	0.022	0.011	248	0.849	0.027	0.007	166
Political Sciences	4510	1.004	0.015	0.007	313	0.940	0.028	0.009	153	0.902	0.057	0.015	145
Sociology	4511	0.964	0.009	0.003	280	0.918	0.017	0.006	176	0.903	0.029	0.014	109
Visual & Performing Arts	5000	0.816	0.030	0.010	66	0.854	0.036	0.012	90	0.805	0.016	0.007	78
Dramatic Arts	5005	0.845	0.023	0.009	87	0.854	0.037	0.013	84	0.813	0.030	0.008	93
Fine Arts & Art Studies	5007	0.803	0.027	0.009	291	0.829	0.020	0.010	237	0.815	0.029	0.014	149
Music	5009	0.818	0.017	0.005	492	0.855	0.019	0.007	345	0.813	0.008	0.005	179
Heath Professions	5100	1.057	0.028	0.013	200	1.097	0.024	0.011	182	1.024	0.073	0.018	185
Communication Disorders	5102	0.921	0.021	0.010	79	0.926	0.028	0.009	54	0.874	0.045	0.019	48
Dentistry	5104	1.159	0.111	0.050	215	1.236	0.068	0.038	214	1.157	0.096	0.048	153
Nursing	5116	0.906	0.045	0.016	94	0.994	0.021	0.013	195	0.943	0.028	0.019	260
Pharmacy	5120	1.037	0.041	0.014	163	1.041	0.018	0.013	129	0.978	0.026	0.014	127
Public Health	5122	1.095	0.039	0.017	87	1.107	0.045	0.028	56	1.050	0.018	0.012	52
Veterinary Medicine	5124	0.986	0.017	0.007	232	1.076	0.016	0.011	213	1.071	0.018	0.008	182
Medical Residency MD	5129	1.421	0.062	0.039	909	1.478	0.083	0.042	667	1.418	0.102	0.044	882
Business Mgmt & Admin	5200	1.222	0.038	0.010	398	1.298	0.046	0.015	286	1.382	0.098	0.033	332
Accounting	5203	1.369	0.067	0.017	76	1.451	0.075	0.020	66	1.533	0.095	0.025	83
Finance	5208	1.301	0.097	0.024	68	1.443	0.171	0.047	48	1.527	0.158	0.039	70
Marketing	5214	1.255	0.090	0.023	66	1.307	0.071	0.028	38	1.368	0.104	0.026	61
General	9999	1.026	0.150	0.046	633	1.016	0.092	0.031	532	1.004	0.112	0.030	433
Mean Values		0.994	0.040	0.015	187	1.009	0.042	0.017	110	0.983	0.047	0.019	95
Mean Weighted Values		1.029	0.033	0.012	370	1.034	0.037	0.016	213	1.041	0.051	0.019	219